

New River Valley



Hazard Mitigation Plan

2004

**For the Counties of Floyd, Giles, Montgomery and Pulaski, the City of Radford,
and the Towns of Blacksburg, Christiansburg, Glen Lyn, Narrows, Pearisburg, Pembroke,
Pulaski, and Rich Creek**

Directed by the
New River Valley Hazard Mitigation Work Group

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Acronyms

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EXECUTIVE SUMMARY

The Disaster Mitigation Act of 2000 requires all localities in the United States to complete and adopt a hazard mitigation plan by November 1, 2004 to maintain eligibility for certain Federal Emergency Management Agency (FEMA) funds. A hazard mitigation plan researches past hazards, assesses future risks, and delineates a long-term plan to reduce future risks. With guidance and funding from the Virginia Department of Emergency Management (VDEM) and FEMA, stakeholders from the New River Valley have created this New River Valley Hazard Mitigation Plan as a roadmap for reducing risks to life and property posed by natural hazards.

Hazards, Risks and Current Mitigation

NRV localities have had at least seven Presidentially-declared disasters since 1965. Assessment of NRV hazard events in the past 125 years reveals that, in terms of frequency, severity and mitigation opportunities, the most serious hazards are flooding, drought and wildfire. A significant earthquake is possible but not likely. Winter storms, landslides, new sinkhole formations, and severe lightning are fairly frequent, but not often extensive in impact to life and property.

Areas at high-risk of flooding are fairly well documented by Flood Insurance Rate Maps (FIRM's) and Studies, produced since the 1970's by the National Flood Insurance Program. In just the largest flood hazards areas in the NRV, there are more than \$70 million in structures in the 100-year floodplain. Some urban flood areas are not reflected on FIRM's, due to the age of the maps. All major NRV localities participate in the National Flood Insurance Program, which also requires some restriction on new development in floodplains. There are only 433 flood insurance policies in the entire NRV, covering \$47.7 million in property. Additionally, an automated rain and stream gauge system alerts forecasters of imminent flooding in some areas. Only one town (Blacksburg) has implemented a reverse-911 warning system. Only one town (Pulaski) has drafted its own flood mitigation plan and used federal money to remove houses from the floodplain. Several towns have stepped up drainage maintenance and clearance. Following several drownings, there is a multi-jurisdictional effort to create a swift-water rescue team.

The region suffered a severe drought from 1998-2002, impacting agriculture, water supplies, and wildfires. In 2002 alone, there were \$10 million in agricultural losses. Moreover, hundreds of residential springs and wells went dry. There are several projects ongoing to extend public water service. Also, there is a regional water study underway to assess the feasibility of interconnecting public water systems to increase security and decrease costs.

In April 2003, after 6 months of significant rains, two 100-acre fires burned simultaneously in the NRV. Though the region has not suffered huge wildfires, a combination of factors makes wildfire a significant risk in parts of the region: steep slopes, large areas of National Forests, dead and dying trees (due to disease and

infestations), limited water infrastructure, and new houses being built in or near the forests. Federal and state forestry officials have many mitigation programs, including dry hydrants for areas without public water.

Additional Mitigation Opportunities

Mitigation opportunities for all major natural hazards include: collecting more hazard and risk data, better utilizing data in geographic information systems, educating the public and elected officials about hazards and mitigation opportunities, using public policy to encourage wise development, and providing for electronic warning systems before or during hazard events. Additionally, for flooding, federal and state funding may be sought to help move repetitive-loss properties, when owners are willing to participate. There also may be more opportunities for regional cooperation, such as a damage-assessment team to help document damages quickly.

Conclusion

There are many projects that would cost-effectively mitigate natural hazards in the New River Valley in the long-term. However, the need for mitigation actions is only readily apparent locally during a major event. Later, the costs and competing needs are overwhelming. Consequently, funding of these locally-initiated mitigation projects will principally need to come from federal and state agencies, which have recognized the value of mitigation investments. These investments will spur more local interest, and most importantly, protect lives and property in the New River Valley.

See local plans on pages 115 to 124. See detailed project lists in Appendix H.